

Title (en)
SELF-EXPANDING PROSTHESIS HAVING STABLE AXIAL LENGTH.

Title (de)
SELBSTAUSDEHNBARE PROTHESE MIT STABILER AXIALER LÄNGE.

Title (fr)
PROTHESE AUTO-EXPANSIVE AVEC LONGUEUR AXIALE STABLE.

Publication
EP 0536164 B1 19940309 (EN)

Application
EP 91910030 A 19910425

Priority
US 54492390 A 19900628

Abstract (en)
[origin: US5064435A] A body implantable stent consists of two or more generally tubular, coaxial and slidably connected stent segments. Each of the stent segments is of open weave construction, formed of multiple braided, helically wound strands of resilient material. The stent is elastically deformed to a reduced radius when deployed. When released after positioning, the stent self-expands radially into contact with a tissue wall segment defining a blood vessel or other body cavity. As each stent segment expands radially, it contracts in the axial direction. To preserve a consistent length of the stent in spite of axial contraction of the segments, the axially outward and non-overlapping portions of the stent can be designed for secure fixation to the tissue wall segment, for example as radially outward flares. Accordingly, axial contraction occurs as a reduction in the length of the medial regions where adjacent stent segments overlap. Alternative approaches to maintain axial length include the addition of reinforcing filaments near the stent opposite ends to increase the restoring force, the provision of fixation hooks at opposite ends of the stent, and securing an elongate, axially directed, flexible and inextensible wire to the opposite ends of the stent.

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A61F 2/06

IPC 8 full level
A61F 2/06 (2006.01); **A61F 2/84** (2006.01); **A61F 2/90** (2006.01); **A61F 2/00** (2006.01); **A61F 2/82** (2013.01)

CPC (source: EP US)
A61F 2/90 (2013.01 - EP US); **A61F 2/852** (2013.01 - EP US); **A61F 2002/826** (2013.01 - EP US); **A61F 2002/8486** (2013.01 - EP US); **A61F 2220/0008** (2013.01 - EP US); **A61F 2220/0016** (2013.01 - EP US); **A61F 2230/0078** (2013.01 - EP US); **A61F 2250/0023** (2013.01 - EP US); **A61F 2250/0063** (2013.01 - EP US)

Cited by
US6129756A; US5683450A; US5800508A; US7112217B1

Designated contracting state (EPC)
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DOCDB simple family (publication)
US 5064435 A 19911112; AT E102466 T1 19940315; CA 2086333 A1 19911229; CA 2086333 C 19940531; DE 69101385 D1 19940414; DE 69101385 T2 19940616; DE 9190098 U1 19930401; DK 0536164 T3 19940509; EP 0536164 A1 19930414; EP 0536164 B1 19940309; ES 2050054 T3 19940501; JP H05507215 A 19931021; JP H0636807 B2 19940518; WO 9200043 A1 19920109

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